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ABSTRACT

Ten college students deemed to have above average writing ability and ten basic skills students participated in a study that examined the role of reading in the writing process. The students wrote one personal essay in a timed and videotaped session. During half of this session, the students wrote and planned as they normally would in an impromptu situation. During the second half of the session, however, the students used a technique termed "blind writing" in which they wrote with pens that had no ink and on paper that allowed no trace of the writing. Visible copies of the writing were obtained through the use of carbon paper. After the 20-minute writing episode, each student read his or her complete product and discussed the entire episode and the strategies employed in producing the writing. Analysis of the writing was limited to the semantic structures of the texts and focused on two levels: the microstructure, or small units of meaning, and the macrostructure, or the coherence networks created to tie the small units together. The analysis indicated no difference between the make-up of the text bases of the visible and the blind writing for either group of students. However, all writers indicated that at some point in their writing they had stopped to read what had been written, suggesting that reading is intrinsically related to writing. (Excerpts from the student essays are appended.) (FL)

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The Evolution of Text: The Interrelationship of Reading and Writing in the Composing Process

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A Characterization of the Role of Reading in the Composing Process

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This study examined the thesis that we do a lot of reading in the process of writing any piece of text. Every author knows that writing is seldom, if ever, a straight-ahead, linear transliteration of fully-formulated thought into at-once complete discourse. Most writing occurs in bits and bursts, a few utterances written between many pauses. Several things seem to occur during these hesitant moments--remembering, planning, reformulating and, certainly, reading. Certain recent studies have implied that a relationship exists between reading and the act of producing text. Some of these studies characterize reading as a subprocess incorporated in the larger activity of writing (Pianko 1979, Bridwell 1979, & Matsuhashi 1979) while others describe it as an associate process that resides alongside writing (Perl 1979). In all, these intriguing descriptions lead to this study's attempt to examine directly the role of reading in the composing process.

Composing in language is a synergistic event and in order to reflect this most-important perspective, the findings describe writing to be simultaneously a product and a process involving not only interactions between the two but reader/text transactions as well.

About here, insert 1

While this study only begins to deal with linguistic synergy, it does present a broad picture which, when coupled with other studies detailing particular aspects of writing, suggests ways to address the complexity of visible language.

Procedures

Examining the role of reading in writing demands creating an experimental setting in which reading alternately can and cannot occur. To do this, that process was divided via a technique called blind writing suggested by Britton and his colleagues (1975). Specifically, ten Traditional undergraduates identified by standardized tests and placement counseling to be above average in writing ability and ten Basic Skills students identified as needing remedial instruction in writing, wrote one personal essay in a timed and videotaped session. During half of this episode, the authors wrote and planned as they normally would in an impromptu situation. During the other half of the episode, however, each author used a pen without ink and wrote on paper textured

to allow no visible trace for the authors to read. Carbon paper and a second sheet of paper were affixed to the top sheet so that a visible copy of the essay could be used in the subsequent analyses. Following the twenty-minute writing episode, each author read his complete product and retrospected about the entire writing episode and the strategies he employed.

All comments were categorized as to level of focus toward discourse and served as an initial indicator of the differences between Traditional and Basic writers.

About here, insert 2

One of the most salient features that characterized the writers was the manner in which they approached their writing. Traditional and Basic students did not view text in the same way and evidently plan for writing differently. Traditional students often commented as to their success in stating a message and the overall structure of their discourse. Basic students, in contrast, focused on spelling, punctuation and word choice. As they examined their papers they focused on words, oftentimes looking for mistakes. This distinction proved most significant, recurred throughout the analyses, and supports other descriptions of the Basic Skills writer (Shaughnessy 1977, Perl 1979).

Findings

The Product. The analysis of the written products was limited to the semantic structures of the texts and focused

on two levels: the microstructure, or the small units of meaning used to express the messages and the macrostructures, or the coherence networks created to tie together the small units. This included a local level of coherence, in the manner in which one constituent connected to the next and a global coherence, in how episodes connected to an overriding gist statement.

The first phase of this analysis entailed propositionalizing (Kintsch 1974, Turner & Green 1977, vanDijk 1977) each text to make comparisons. Although on initial reading the texts seemed to readers to hold differences in meaning and structure, this analysis indicated no difference between the make-up of the text bases in the visible and blind writing for either group.

About here, insert 3

The writing that was done without reading was built out of the same units as that which was written visibly and indicated that, if meaning of an evolving text is affected by the writer's ability to read what he is saying, it does not involve isolated bits. Two examples can illustrate this point. The essays, as produced by two writers during the session read:

About here, insert 4

Converting these essays to their microstructural bases revealed little difference between them. Essay A, usually perceived by readers to be coherent and tightly structured, generated 251 micropropositions while Essay B, less clearly structured and enunciated, generated 233.[1] Any differences seemed to related more to the manner in which the individual units of meaning were connected into structured discourse. This became the second phase of the product analysis and was approached by mapping the microstructure to represent spacially what had been done verbally in the essays. The maps revealed vast differences between the connectedness of the texts and, because they are representative of their groups, indicate differences in the Traditional and Basic Skills writers' planning. Both essays give some indication that all the authors were susceptible to deviation from plan in writing done without reading.

About here, insert 5

Writer A had briefly outlined before she became writing and referred to her outline as she wrote, a practice she reported later that she always uses. Further she described a formula, sometimes called the "Five Paragraph Theme" on which

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[1]Broken into category, Essay A consisted of 91 predications, 76 modications, 40 connectors, 44 references. Essay B, in order: 49, 5o, 50, 33. While Essay A uses more modification and less connection, each essay divided the total propositions in each category evenly across conditions.

she relies in impromtu situations. Her outline, essay and map reveal this structure. The first paragraph introduces the topic and states a main idea or "gist." The next three paragraphs each explicate the topic and, through the use of macroconnectors ("first;" "finally") clearly tie each episode back to the gist and divide each from the other. Having illustrated her point, she ties the thoughts together in a conclusion that reiterates the gist. While she managed to create coherence, she also produced a routine and superficial text. The one notable exception occurs during the third episode. Immediately after switching to the Blind condition, the author deviated from her outline to include an anecdote, the only narrative piece within her essay. The map reveals this narrative as a linear string, unique in her structuring. Later the author reported she had felt Blind writing to be "more like talking." Indeed, for this author, it was. While the author clearly controlled her deviation from plan it is interesting to note that it occurred only in the absence of the visible record. Author B had no evident plan in mind and appeared to build his essay piece by piece -- a task he found to be difficult without the assistance of reading. The map revealed a high degree of local coherence in the visible condition but almost none in the blind. There is little or no evidence of a global structure throughout. This author began his essay without stating a superordinate concept that could have acted as an anchor upon which to tie

the parts. Failing this, his essay indicated better global structure or chance for one to eventually emerge, and became increasingly confused as the writer moved through the blind condition.

About here, insert 6

When averages for local and global coherence were compared; significant differences were found. Concerning local coherence, Traditional students obtained high degrees of local coherence that were maintained regardless of the author's ability to read. In contrast, Basic writers' texts were less locally coherent than their peers'. When these authors wrote without the ability to read, they lost local coherence. Global coherence differentiated the texts of good and poor writers as well. Although the groups produced the same average number of episodes, the ties they made were quite different. Traditional writers often tied all episodes together while Basic writers just as often failed to state main ideas and, without this, had no gist on which to anchor the parts.

The Process. The process description charaterized the writing act by noting the frequency of thirteen specific behaviors under visible and blind conditions.

About here, insert 7

As in the product analyses, the Traditional students emerged stable across conditions while the Basic students were not.

Of direct importance to this study, was the frequency of reading. Notably, when it was possible, all the writers in the study read. Traditional students were observed to use reading as a writing activity twice as often than did the Basic Skills writers.

The comparative increase in the frequency of process behaviors across conditions for the Basic students suggested that, for them, blind writing was drastically less fluent than writing that is accomplished with reading. As noted above, when it was available, these writers had relied on reading and its removal must account for some of their increased hesitation in blind writing. The findings then support the notion that poor writers, like better writers, are readers of their texts. While the poorer writers in this study did not read as often as the more skilled authors--and this is, no doubt, an important difference--it would be too simple to conclude that Basic writers produced poorer texts or used a less fluent process only because they did not read or because reading was not as important to them. (These were, after all, the writers most significantly affected by the situation that constrained their reading ability.) The Basic writers in this study consistently exhibited a word-level focus toward text and gave little evidence of global planning that might reflect a mental

scheme for a connected essay. Not having a clear mental plan, they were, indeed, text-bound and needed to read their texts in order to keep the process moving. Combined with their penchant for in-process error-searching, these authors' process seemed to emphasize editing over a short-circuited creative process. In contrast, the Traditional students, as a group, had evidenced a discourse-level orientation and revealed that they could conjure up several ways to connect discourse. These students, when not allowed to read their writing, could rely on a mental text to keep their composing process recursive and stable.

The Interaction. Neither the writing process nor the written product exist in isolation. The product and the process create each other as the message at hand is evolved. The analyses of interactions that were developed in this study were limited attempts to relate the writing process to syntactic and semantic features of the texts. Each process behavior was categorized as having occurred in one of four syntactic locations.

About here, insert 8

There is some indication from the findings that Traditional students write in larger units than do Basic Skills writers. More often the Traditional students tended to stop at terminal junctures. This indicates that when these students paused in

their process it was often between sentences. They seemed to establish for themselves a fluency that resulted from writing in complete syntactic units. The Basic Skills students tended to pause within words, as if considering spelling or lexical choice, far more often than the other group. Given the discourse-level focus of the Traditional students and the word-orientation of the Basic Skills students exhibited throughout the prior analyses, these findings add to the profiles of the groups.

However, it is hazardous to infer that syntactic location can disclose what was going on in a writer's mind as he pauses. An author may be considering a range of semantic, syntactic, lexical or pragmatic factors whenever he pauses and any further interpretation of these findings is not be made.

A similar analysis of the interaction between the process and the semantic structure of the texts was also attempted. Semantic structure, however, does not hold the linearity of syntax and attempts to place the behaviors within structural semantic units became problematic. Although this study does not report any description of process/semantic structure interaction, it identifies this as an important area to be explored.

The Transaction. Every text event incurs a transaction between a reader and a writer linked through discourse. The analyses reported thus far were text-based and, in the absence

of a reader, were relatively meaningless. If the findings of the analyses describe meaningful differences, then readers should respond to the texts in different ways.

Three outside readers read the twenty texts to select the best and the worst samples. They chose two as exceptionally poor and agreed one essay as the best.

About here, insert 9

These readers seemed to be particularly sensitive to local and global coherence, prefering texts that reflect tight structure to those that were looser, or that exhibited fluctuation in coherence. The readers also prefered a text that had been produced in a fluent manner with global planning by the author. Reader judgement of text quality supported the indices that had been developed in the study and was taken as a verification of them.

Conclusions

The premise underlying this study was that there is a dynamic interrelationship between reading and writing in the composing process, a notion that was supported by the findings. Not one writer involved in the study had produced his text without, at some point, stopping in the forward flow of his discourse to read. Reading, these data suggest, is intrinsically related to the recursiveness of writing.

Several researchers have identified recursiveness as the most salient feature of writing, a quality allows the

writer to cycle forward and back as a message evolves. This study cites reading as one of two sources of recursiveness in text. Reading allows a writer to return in the text to pick up threads to the discourse, recall what has been released from immediate attention, or engender new thought. The second source of recursion is a mental plan or scheme for text that acts as a guide throughout the production discourse. The result of such a plan is that it immediately delimits somewhat the author's semantic field. A plan may imply an audience, a tone or stance, or a structure that impels the author in logical directions and discourages less predictable outcomes. While reading allows the author to return in the text to monitor or recall, mental plans enable the writer to go forward or back in mind. Full recursiveness is the quality that results from a combination of these two. Together, reading and planning allow a writer the power to use text as he produces text.

In this study the Traditional writers' orientation encouraged them to be more fully recursive in their writing. These writers indicated that they formed superstructures that they used to direct their discourse. As they wrote, they often stopped to read the emergent text, matching it against their plan, modifying the text or the plan if necessary, editing at several levels. When these writers were not allowed to read their texts, they resorted to an increased reliance on their plans in order to keep their

writing recursive. This is the reason for their ability to remain stable across conditions.

The Basic Skills writers often gave little indication of overall planning. Although it may be possible to build discourse from words and small syntatic units, it is a phenomenon that is text-bound and requires the visual processing of reading. These authors, when not allowed to read, lost their primary means of recursiveness in writing and began to string together words that seldom evolved into true texts.

In all, the findings indicate that we can no more understand writing by studying the written text outside the writer or the process that brought it to be than we can understand reading by isolating it from text or reader. The lines that we have drawn between reading and writing in the composing process are arbitrary and, to focus on each in isolation can only be a distraction on our way to understanding the recursive language process that is fundamental in the evolution of any text.

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The year is 1980! It is an exciting time and promises to be an innovative decade. One can certainly look back over the past twenty to thirty years and see that times have changed! Today we are living in the "me" era, the decade of the "new morality". The sixties were tumultous, the seventies, serene. The '80's...?

People tend to change with the times. They attempt to assimilate their lifestyles to "fit" in. I, therefore, expect my life to differ from my parents lives in several ways.

First of all, I am currently being exposed to a broader educational background than my parents ever were. My mother is a high school graduate and my father quit school when he was 17. Although both are successful business-people, I believe they are both a bit "unpracticed" when it comes to analyzing world events.

Secondly, I plan to be a teacher and am seeking professional status. My parents have changed occupations on several occassions and have refrained from long-term committments. This seems strange to me.

Finally, I believe our lives will differ greatly where social interactions are concerned. My parents are less concerned with social activities. They much prefer "quiet evenings at home". On the other hand, I enjoy going out with my friends.

Blind

Related to this point, I also feel myself to be more politically active than my parents. For example, when I talked with my parents on the phone the other day, I brought up the draft issue. Dad refused to believe that women could possibly be considered as viable candidates for the draft. He (and his generation) seem to have totally missed any chance they might have had for "political activism". (He was even born too late for the Korean War!)

In conlusion, I should specify that the major differences between my life and my parents lives is not one of quality, but rather a difference in philosophies. They are content (as someday I might be), and I am just now reaching out for a beginning, an identity.

Insert 4A

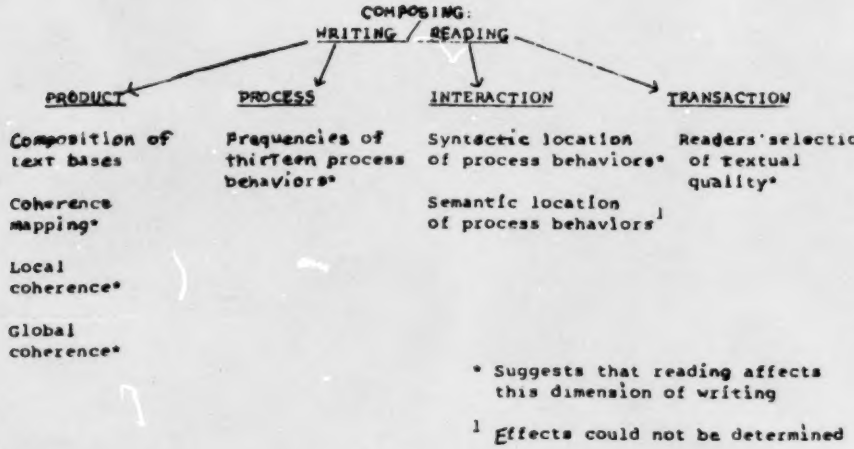
First of all, when my parents were growing up, it was a lot different than that it is now. Economy, and what they did when they were growing up and what I am doing now. They had to struggle every day and work in place for their parents. Now I am going to school not working and feel a lot of the time that maybe if I had to work for my schooling I might be different. When you tend to get things handed to you and expect nothing in return like have to worry about paying all that money back you kind of feel

Blind

Since not having that choice whether of not it hard to feel like my parents feel when they were growing up. What I have learn in my short life is it better to have to work hard for something and not have it give to you all the time. Not saying that I'll not happy but its more liking to have a effect on you later. One thing for sure is my life now and later on when and if I get married will be totally different then my parents.

Hope I can be a lot like them in many ways but if not they won't be made. Sometimes I wish I could be and maybe I can but times change and be hard to achieve what my parents have achieved so far in life. Hopefully whatever I do I will be satisfied.

Insert 4B

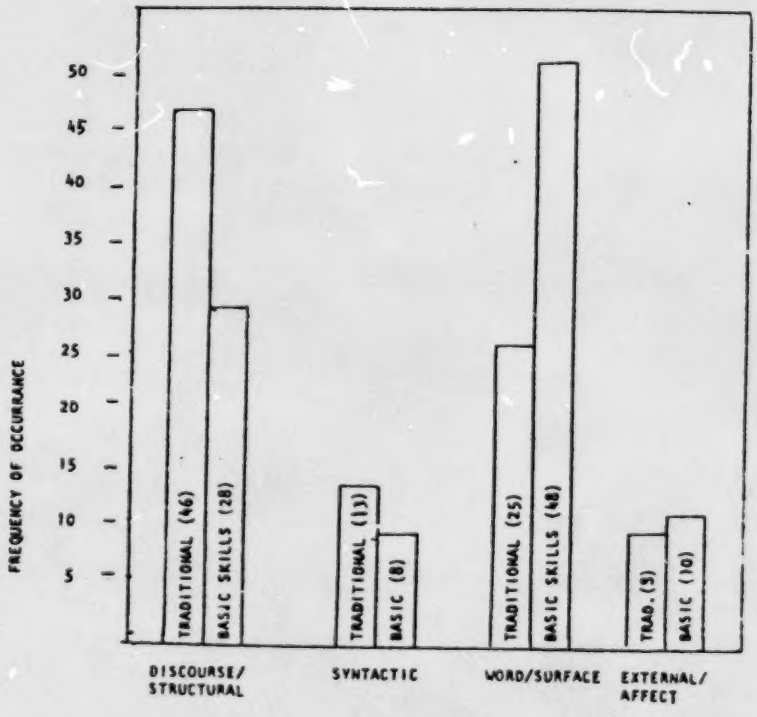


* Suggests that reading affects this dimension of writing

[1] Effects could not be determined

OVERVIEW OF THE ANALYSES REFLECTING FOUR FACTORS OF SIGNIFICANCE.

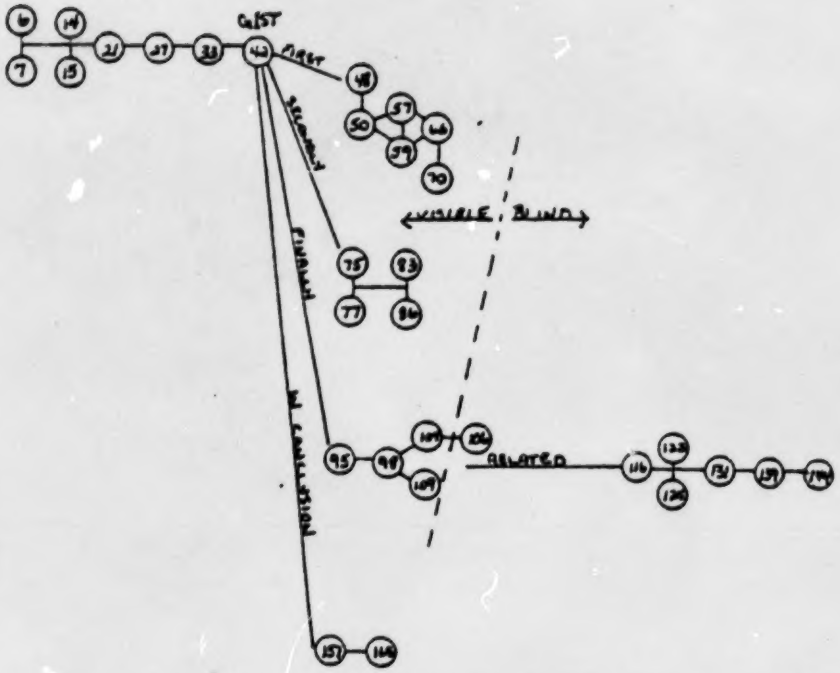
Insert 1.



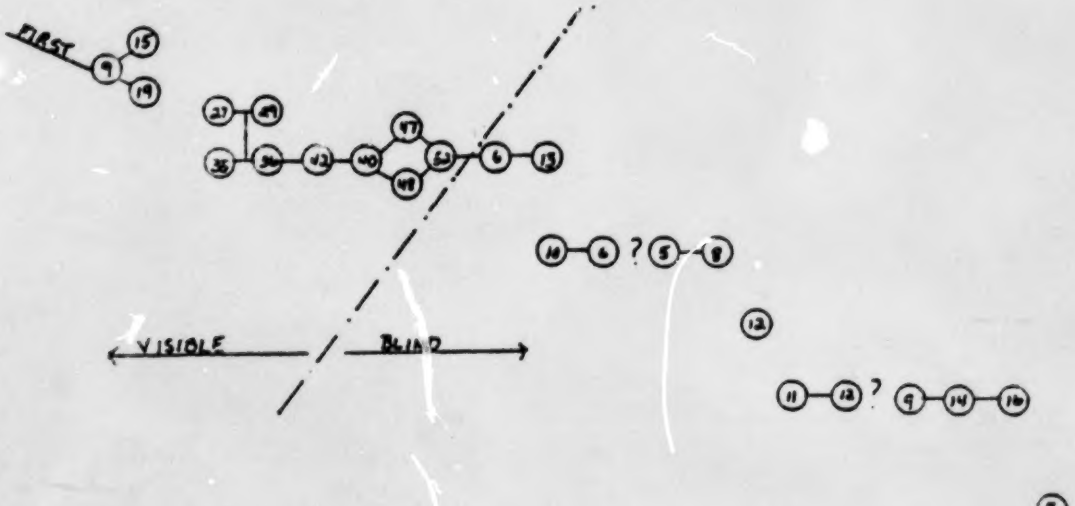
RETROSPECTIVE COMMENTS CLASSIFIED ACCORDING TO LEVEL OF FOCUS TOWARD THE TEXT

Insert 2.

BEST AVAILABLE COPY



COHERENCE MAP OF A WELL-FORMED AND HIGHLY COHERENT ESSAY



MAP OF AN ESSAY WITH MODERATE LOCAL COHERENCE AND NO GLOBAL COHERENCE

Insert 5.

PROPOSITIONAL TYPE		$\bar{X}$	t value	Significance
PREDICATIONS	V	51.95	.63	.539
	B	49.95		
MODIFIERS	V	34.25	.17	.868
	B	33.50		
CONNECTORS	V	24.15	.83	.424
	B	23.05		

degrees of freedom: 19

PROPOSITIONAL TEXT BASE COMPOSITION
BY CONDITION FOR THE TOTAL GROUP

Insert 3.

GROUP	MEAN	MEAN DIFFERENCE	t	P, at .01
TRADITIONAL	V .92 B .93	.21	5.41	S
BASIC SKILLS	V .85 B .76			

LOCAL COHERENCE OF TEXTS BY ABILITY AND CONDITION

GROUP	MEAN	MEAN DIFFERENCE	t	P, at .01
TRADITIONAL	.67	.36	4.17	S
BASIC SKILLS	.31			

GLOBAL COHERENCE OF TEXTS BY ABILITY

Insert 6.

Traditional				Basic			
	V		B		V		B
1. Short pause	(133)	1. SP	(158)	1. SP	(74)	1. SP	(217)
2. Read/visible	(51)	2. WWS	(28)	2. R/V	(25)	2. WWS	(18)
3. Within word stop	(25)	3. LP	(19)	3. MULT	(19)	3. CO	(16)
4. Multiple	(19)	4. CO	(14)	4. WWS	(18)	4. LP	(11)
5. Crossout	(10)	5. MULT	(10)	5. CO	(6)	5. VERB	(10)
6. Read/outline	(8)	6. R/V	(8)	6. LP	(5)	6. MULT	(8)
7. Long pause	(7)	7. R/D	(3)	7. LA	(3)	7. R/V	(7)
8. Read directions	(3)	8. R/O	(2)	8. VERB	(1)	8. R/B	(3)
9. Verbalize	(2)	8. INS	(2)	8. FS	(1)	9. LA	(1)
10. Look away	(1)	10. LA	(1)	13. INS	(0)	9. R/D	(1)
10. Insert	(1)	13. VERB	(0)	13. R/D	(0)	13. INS	
13. False start	(0)	13. FS	(0)	13. R/O	(0)	13. FS	(0)
13. Read/blind	(0)	13. R/B	(0)	13. R/B	(0)	13. R/O	(0)
TOTAL: 505	260/51%		245/49%	444	152/34%		292/66%

FREQUENCY OF OCCURANCE OF PROCESS BEHAVIORS
RANKED FOR CONDITION AND ABILITY

Insert 7.